



Dart Aerospace Ltd.
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Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

JUN 20 2018

D412-758-015
Job Sheet 179515



Part No: D412-758-015

Job Qty: 1 ea

Part Name: GPS Receiver Gimbal Mount



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 6/20/18

Job Tracking No:

Due Date: 7/11/18

Created By: Linda Lacelle

Type: SOLD

Description:

Note: DWG REV D SHEET 24 IPP rev:A 10.06.21 new issue DD verified by:EC IPP REV:B 12.10.24 ECN 12-669 DD VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea	7/11/18	7/11/18	0.00	0.00	Start Up Stores/Pkg-1		JUN 25 2018
110	Packaging	1 pcs	7/11/18	7/11/18	0.00	0.00	Packaging1-4		JUN 25 2018
115	QC	1 pcs	7/11/18	7/11/18	0.00	0.00	QC4		
120	Packaging	1 pcs	7/11/18	7/11/18	0.00	0.00	Packaging3-2		
125	DC	1 pcs	7/11/18	7/11/18	0.00	0.00	DC		
130	QC21-FG	1 Ea	7/11/18	7/11/18	0.00	0.00	QC21		

Part Op 120 - Identify and pack for shipping as per PPP D412-758-015 Location:FG023
Descriptions: 125 - Photocopy bluefile & type labels per PPP D412-758-015 CHG002

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
AN525-10R10	Screw	4 Ea (4 ea)	90-Start up Operation	FM135979
AN525-10R9	Screw	3 Ea (3 ea)	90-Start up Operation	FM133990-17
D2464	Neoprene Seal (\$Per Foot) 2x6.6"	1.1000 ft (1.1 ea)	90-Start up Operation	F12946
D3525-1	Placard	1 Ea (1 ea)	90-Start up Operation	5078642
D3531-041	Top Mounted Gps Bracket Assembly	1 Ea (1 ea)	90-Start up Operation	5081493
D3645-1	Washer	4 Ea (4 ea)	90-Start up Operation	F123144
MS21042L06	Nut	4 Ea (4 ea)	90-Start up Operation	3049834
MS21042L3	Nut	3 Ea (3 ea)	90-Start up Operation	5078167
MS24693-S29	Screw	4 Ea (4 ea)	90-Start up Operation	FM136451-40
NAS1149D0363J	Washer	7 Ea (7 ea)	90-Start up Operation	5015269
NAS1149DN632J	Washer	4 pcs (4 ea)	90-Start up Operation	5024482
RAM-B-201U-A	Socket Arm, 1.75"	2 pcs (2 ea)	90-Start up Operation	3077247
RAM-B-202U	Round Plate Mount, Single 1" Ball	2 pcs (2 ea)	90-Start up Operation	5082700
RAM-B-217U	Round Plate Mount, Dual 1" Ball	1 pcs (1 ea)	90-Start up Operation	5082698

WORK ORDER NON-CONFORMANCE / UPDATE



DOA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order update only

DISPOSITION

Work Order: _____
Part No. _____
NCR No. _____

Re: _____
Use: _____
Suspected Unapproved

Dart Aerospace Ltd.
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CANADA
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Email: sales@dartaero.com
www.dartaerospace.com

Date: 06/25/18

Description Work Order Deviation

Date: _____ Step #: _____

AINST DEPARTMENT/PROCESS

Tube	Water Jet	Engineering
II Fab	Prod. Eng. Coord.	Quality
Shing	Rec/Store/Packaging	Other
osite	Supplier	

MRB (QSI042) Approval

ition

Completed By

Lead hand / Supervisor
Approval Verification

QC / QA Coordinator
Approval

Root Cause

FAULT CATEGORY

Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Mistread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐		☐		☐		☐		☐
Misidentified	☐	Past Due	☐	OTHER :	☐		☐		☐		☐



Container No: S083646
Part: D412 - 758 - 015
Job No: 179515
Serial No/Batch: S083646
Revision: D
Inspector:
Exp Date:
Instructions:

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	AN525-10R10	4	240	0
	AN525-10R9	3	92	0
	D2464	1	635	0
	D3525-1	1	12	0
	D3531-041	1	4	0
	D3645-1	4	18	0
	MS21042L06	4	134	0
	MS21042L3	3	1,478	0
	MS24693-S29	4	52	0
	NAS1149D0363J	7	1,945	0
	NAS1149DN632J	4	219	0
	RAM-B-201U-A	2	8	0
	RAM-B-202U	2	1	0
	RAM-B-217U	1	7	0

Part Specifications

Specifications could not be found.

Plex 6/20/18 7:53 AM dart.lacelle.linda

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

Change Record

PAGE 1 OF 1

Part Number: D412-758-015

Description: GPSMAP TOP MOUNTED GPS RECEIVER GIMBAL MOUNT

[illegible]

REFERENCE ONLY

5.0 PARTS LIST

QTY -011	QTY -013	QTY -015	Part Number	Description
X			D412-758-011	Bottom Mounted GPS Receiver Gimbal Mount
	X		D412-758-013	Top Mounted GPS Receiver Gimbal Mount
		X	D412-758-015	GPSMAP Top Mounted GPS Receiver Gimbal Mount
1			D3514-041	Bottom Mounted Gimbal Assembly
	1		D3514-043	Top Mounted Gimbal Assembly
		1	D3531-041	Bracket Assy.
	2	2	D2464-0066	Neoprene Seal
1	1	1	D3525-1	Placard
1			D3527-1	Support Arm
1			D3530-1	Base Plate
1			D3530-3	Mounting Plate
1	1		D3534-1	Doubler
	4	4	D3645-1	Washer
		3	AN525-10R9	Screw
	4	4	AN525-10R10	Screw
3			AN526-632R7	Screw (or MS35206-229)
3		4	NAS1149DN632J	Washer (Alternate p/n AN960JD6)
2	4	7	NAS1149D0363J	Washer (Alternate p/n AN960JD10)
3		4	MS21042L06	Nut
1		3	MS21042L3	Nut
4	4		MS24693-S27	Screw
1			MS27039-1-09	Screw
		4	MS24693-S29	Screw
		2	RAM-B-201U-A	Socket Arm, 1.75"
		2	RAM-B-202U	Round Plate Mount, Single 1" Ball
		1	RAM-B-217U	Round Plate Mount, Dual 1" Ball

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Revision: D
Date: 12.08.10